40. The method of claim **39**, wherein the amino acid sequence is comprised in a protein or peptide.

41. The method of claim **1**, wherein the CendR element is comprised in a protein or peptide.

42. The method of claim **40**, wherein the protein or peptide can be internalized into a cell, penetrate tissue, or both when the amino acid sequence is present in the protein or peptide but not when the amino acid sequence is not present in the protein or peptide.

43. The method of claim **40**, wherein the protein or peptide can penetrate tissue when the amino acid sequence is present in the protein or peptide but not when the amino acid sequence is not present in the protein or peptide.

44. The method of claim **40**, wherein the protein or peptide can be internalized into a cell and penetrate tissue when the amino acid sequence is present in the protein or peptide but not when the amino acid sequence is not present in the protein or peptide.

45. The method of claim **39**, wherein the amino acid sequence can be internalized into a cell, penetrate tissue, or both without being associated with the co-composition.

46. (canceled)

47. The method of claim **39**, wherein the amino acid sequence can penetrate tissue without being associated with the co-composition.

48. (canceled)

49. The method of claim **39**, wherein the amino acid sequence can be internalized into a cell and penetrate tissue without being associated with the co-composition.

50. (canceled)

51. The method of claim **39**, wherein the amino acid sequence is the only functional internalization element in the protein or peptide.

52. The method of claim **40**, wherein the protein or peptide is circular.

53. The method of claim **40**, wherein the CendR element is at the C-terminal end of the protein or peptide.

54. The method of claim **40**, wherein the internalization, penetration, or both of the co-composition into or through a cell, tissue, or both is enhanced when the amino acid sequence is present in the protein or peptide but not when the amino acid sequence is not present in the protein or peptide,

wherein the penetration of the co-composition into or through tissue is enhanced when the amino acid sequence is present in the protein or peptide but not when the amino acid sequence is not present in the protein or peptide,

wherein the internalization and penetration of the co-composition into or through a cell and tissue is enhanced when the amino acid sequence is present in the protein or peptide but not when the amino acid sequence is not present in the protein or peptide,

wherein the internalization, penetration, or both of the co-composition into or through a cell, tissue, or both is enhanced when the CendR element is present in the protein or peptide but not when the CendR element is not present in the protein or peptide,

wherein the penetration of the co-composition into or through tissue is enhanced when the CendR element is present in the protein or peptide but not when the CendR element is not present in the protein or peptide, or

wherein the internalization and penetration of the co-composition into or through a cell and tissue is enhanced when the CendR element is present in the protein or peptide but not when the amino acid sequence is not present in the protein or peptide.

55-97. (canceled)

98. A composition comprising a CendR element and a co-composition, wherein the CendR element and the co-composition are indirectly non-covalently associated with each other, the CendR element and the co-composition are not covalently coupled with each other, and the CendR element and the co-composition are not directly non-covalently associated with each other, wherein the composition does not comprise VEGF, and wherein the CendR element comprises the sequence $X_1X_2X_3X_4$, wherein X_1 is selected from the group consisting of R, K or H, wherein X_4 is selected from the group consisting of R, K, H, or KG, and wherein X_2 and X_3 can each be, independently, any amino acid.

99. (canceled)

100. The composition of claim **98**, wherein the CendR element is associated with one or more accessory molecules.

101-103. (canceled)

104. The composition of claim **100**, wherein at least one of the accessory molecules comprises an RGD peptide, iRGD, a Lyp-1 peptide, a NGR peptide, iNGR, an RGR peptide, a HER2 binding peptide, or a combination.

105. The composition of claim **100**, wherein one or more of the accessory molecules are independently a homing molecule, a targeting molecule, an affinity ligand, a cell penetrating peptide, an endosomal escape molecule, a subcellular targeting molecule, a nuclear targeting molecule, or a combination.

106. The composition claim **105**, wherein one or more of the accessory molecules are homing molecules.

107-112. (canceled)

113. The composition of claim **100** **100-112**, wherein the CendR element selectively homes to a tumor.

114. The composition of claim **113**, wherein the CendR element selectively homes to tumor vasculature.

115. The composition of claim **100**, wherein the CendR element selectively homes to lung tissue.

116. The composition of claim **100**, wherein the CendR element selectively homes to heart tissue.

117. The composition of claim **98**, wherein the CendR element is an activatable CendR element.

118. The composition of claim **117**, wherein the activatable CendR element is a protease-activatable CendR element.

119. (canceled)

120. The composition of claim **98**, wherein the CendR element and the co-composition are not bound to each other.

121. The composition of claim **98**, wherein the co-composition comprises a therapeutic agent.

122. The composition of claim **98**, wherein the co-composition comprises a detection agent.

123. The composition of claim **98**, wherein the co-composition comprises a carrier, vehicle, or both.

124. The composition of claim **98**, wherein the co-composition comprises a therapeutic protein, a therapeutic compound, a therapeutic composition, a cancer chemotherapeutic agent, a toxin, a cytotoxic agent, an anti-inflammatory agent, an anti-arthritic agent, a growth factor, a cytokine, a chemokine, a compound that modulates one or more signaling pathways, an antibody, a nucleic acid, a nucleic acid analog, a cell, a virus, a phage, a viral particle, a phage